



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

**MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION**

11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786)315-2590 F (786) 31525-99

www.miamidade.gov/economy

Tremco, Inc.
23150 Commerce Park Dr.
Beachwood, OH 44122

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code including the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Vulkem® Liquid Applied Roof (LAR) Systems

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of pages 1 through 8.
The submitted documentation was reviewed by Alex Tigera.



NOA No.: 15-0127.02
Expiration Date: 07/16/20
Approval Date: 07/16/15
Page 1 of 8

ROOFING SYSTEM APPROVAL

Category: Roofing
Sub-Category: Liquid Applied Roof System
Material Polyurethane
Deck Type: Concrete
Maximum Design Pressure -850 psf

TRADE NAMES OF PRODUCTS MANUFACTURED OR LABELED BY APPLICANT:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>
Vulkem® 350NF-SL	Available in 5 & 55 gallons	ASTM C 836 ASTM C 957	One part, Low VOC polyurethane base coat waterproofing membrane. Do Not Apply to Vertical Surfaces.
Vulkem® 350NF-R	Available in 5 & 55 gallons	ASTM C 836 ASTM C 957	One part, Low VOC polyurethane base coat waterproofing membrane.
Vulkem® 351	Available in 5 & 55 gallon pails	ASTM C 957	One part, sand filled, top coat aliphatic polyurethane coating to provide chemical and UV resistance.
Vulkem® 951NF	Available in 4.2 gallon kit	ASTM C 957	Two part, sand filled, top coat aliphatic polyurethane coating to provide additional chemical and UV resistance.
Vulkem® 346	Available in 5 & 55 gallon pails	ASTM C 957	One part, sand filled, intermediate/top coat aliphatic polyurethane coating to provide chemical and UV resistance

PRODUCTS MANUFACTURED BY OTHERS:

<u>Product</u>	<u>Dimensions</u>	<u>Test Specification</u>	<u>Product Description</u>	<u>Manufacturer</u>
Unimin Aggregate	N/A	N/A	2040 (20/30 mesh size) Silicone Dioxide (silica) aggregate which imparts non-slip texture and wear resistance.	Generic



EVIDENCE SUBMITTED:

<u>Test Agency</u>	<u>Test Identifier</u>	<u>Test Specification</u>	<u>Date</u>
Underwriters Laboratories, Inc.	TGFU.R10845	UL 790	06/07/13
PRI Construction Materials Technologies LLC	TRE-102-02-01	ASTM C 957	12/11/12
	TRE-103-02-01	TAS 114 D	11/10/12
	TRE-042-02-01	ASTM C 836	02/04/11
	TRE-043-02-01	ASTM C836	02/04/11
	TRE-099-02-01	ASTM C 957	12/11/12
	TRE-041-02-01	TAS 114 D	01/20/12
	TRE-100-02-01	ASTM C 957	12/17/12
	TRE-101-02-01	TAS 114 D	11/10/12



APPROVED APPLICATIONS:

Deck Type 1	Concrete
Deck Description:	Min. 2500 psi, structural concrete
System Types F(1):	Vulkem® 350NF/351 Liquid Applied Roof (LAR) System
Substrate Preparation:	All surfaces must be dry and clean, free of depressions, spalled areas, honeycombs, or voids. Clean and free of any non-compatible curing compounds, release agents and other surface contaminants. Substrate shall be smooth with a hair broom finish. Preferably water cured.
Primer:	Primer not required. Refer to manufacturer's recommendation or code requirements.
Base Coat:	Apply 40 wet mils of Vulkem® 350NF-R or 350NF-SL to the entire area to be coated, including all detail coats, but excluding expansion joints. Use a V-notched squeegee, followed by back rolling to evenly distribute coating and eliminate pinholes. Base coat shall be allowed to cure in accordance with manufacturer's instructions to a firm but tacky rubber. For control joints or cracks, refer to the manufacturer's instructions. Do Not Apply 350NF-SL to Vertical Surfaces.
Top Coat:	Apply one or more coats of Vulkem® 351 with a solvent resistant roller sleeve at a rate of 100 sq. ft. /gal to a minimum thickness of 15 wet mils. Broadcast 20/30 mesh size aggregate into wet coating at a rate of 12 – 18 pounds per 100 square feet and backroll into membrane.
Maximum Design Pressure:	-850 psf (See General Limitation #9)



Deck Type 1	Concrete Decks
Deck Description:	Min. 2500 psi, structural concrete
System Types F(2):	Vulkem® 350NF/951NF Liquid Applied Roof (LAR) Systems
Substrate Preparation:	All surfaces must be dry and clean, free of depressions, spalled areas, honeycombs, or voids. Clean and free of any non-compatible curing compounds, release agents and other surface contaminants. Substrate shall be smooth with a hair broom finish. Preferably water cured.
Primer:	Primer not required. Refer to manufacturer's recommendation or code requirements.
Base Coat:	Apply 40 wet mils of Vulkem® 350NF-R or 350NF-SL to the entire area to be coated, including all detail coats, but excluding expansion joints. Use a V-notched squeegee, followed by back rolling to evenly distribute coating and eliminate pinholes. Base coat shall be allowed to cure in accordance with manufacturer's instructions to a firm but tacky rubber. For control joints or cracks, refer to the manufacturer's instructions. Do Not Apply 350NF-SL to Vertical Surfaces.
Top Coat:	Apply one or more coats of Vulkem® 951NF with a solvent resistant roller sleeve at a rate of 125 sq. ft/gal to a minimum thickness of 12 wet mils. Broadcast 20/30 mesh size aggregate into wet coating at a rate of 12 – 18 pounds per 100 square feet or to refusal.
Maximum Design Pressure:	-440 psf (See General Limitation #9)



Deck Type 1	Concrete Decks
Deck Description:	Min. 2500 psi, structural concrete
System Types F(3):	Vulkem® 350NF/346/346 Liquid Applied Roof (LAR) System
Substrate Preparation:	All surfaces must be dry and clean, free of depressions, spalled areas, honeycombs, or voids. Clean and free of any non-compatible curing compounds, release agents and other surface contaminants. Substrate shall be smooth with a hair broom finish. Preferably water cured.
Primer:	Primer not required. Refer to manufacturer's recommendation or code requirements.
Base Coat:	Apply 25 wet mils of Vulkem® 350NF-R or 350NF-SL to the entire area to be coated, including all detail coats, but excluding expansion joints. Use a V-notched squeegee, followed by back rolling to evenly distribute coating and eliminate pinholes. Base coat shall be allowed to cure in accordance with manufacturer's instructions to a firm but tacky rubber. to a firm but tacky rubber. For control joints or cracks, refer to the manufacturer's instructions. Do Not Apply 350NF-SL to Vertical Surfaces.
Intermediate Coat:	First coat of Vulkem® 346 is applied with a heavy duty roller (1/2" to 3/4" nap) to a minimum thickness of 12 wet mils. Immediately following the application of the Vulkem® 346, broadcast 20 to 30 mesh silica sand into wet Vulkem® coating at a rate of 15-18 lbs per 100 square feet or flood to refusal. Allow the membrane to cure. Sweep away excess silica after the coating has cured. Repeat the application for a second coat of the Vulkem® 346. Allow to cure.
Top Coat:	Apply one coat of Vulkem® 346 with a solvent resistant roller sleeve at a rate of 125 sq.ft/gal to a minimum thickness of 12 wet mils.
Maximum Design Pressure:	-445 psf (See General Limitation #9)



MANUFACTURER'S REQUIREMENTS:

1. All work shall be performed by a Contractor licensed to do roofing/waterproofing work in Miami-Dade County. Contractor shall be familiar with the details and shall be approved by Tremco, Inc., Tremco, Inc.'s Liquid Applied Roof (LAR) Systems shall be installed solely by approved applicators and only with installation equipment approved by Tremco, Inc.
2. Contractor shall submit to the Building Official for review the system specifications and details. Submission of these documents, as well as the proper application and installation of all materials shall be the sole responsibility of the contractor.
3. Flashings shall be installed according to the manufacturers published standard details, specific details, approved by Tremco, Inc., shall be submitted to the Building Official for review.
4. Tremco, Inc., Vulkem® Liquid Applied Roof (LAR) Systems shall not be installed without consultation with Tremco, Inc., if ambient or surface temperature is below 40°F. Do not apply to wet or frozen concrete surface.
5. Tremco, Inc., Vulkem® Liquid Applied Roof (LAR) Systems shall not be installed over lightweight insulating concrete or plywood decking.
6. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform to Roofing Application Standard RAS 111 and the wind load requirements of applicable Building Code.

CONCRETE DECK SYSTEM LIMITATIONS:

1. If mechanical attachment to the structural deck through the lightweight insulating concrete is proposed, a field withdrawal resistance testing shall be performed to determine fastener patterns and density. All testing and fastening design shall be in compliance with Testing Application Standard TAS 105 and Roofing Application Standard RAS 117, calculations shall be signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant.



GENERAL LIMITATIONS:

1. Fire classification is not part of this acceptance, refer to a current Approved Roofing Materials Directory for fire ratings of this product.
2. Insulation may be installed in multiple layers. The first layer shall be attached in compliance with Product Control Approval guidelines. All other layers shall be adhered in a full mopping of approved asphalt applied within the EVT range and at a rate of 20-40 lbs./sq., or mechanically attached using the fastening pattern of the top layer.
3. All standard panel sizes are acceptable for mechanical attachment. When applied in approved asphalt and/or adhesives panel size shall be 4' x 4' maximum.
4. An overlay and/or recovery board insulation panel is required on all applications over closed cell foam insulations when the base sheet is fully mopped. If no recovery board is used the base sheet shall be applied using spot mopping with approved asphalt, 12" diameter circles, 24" o.c.; or strip mopped 8" ribbons in three rows, one at each sidelap and one down the center of the sheet allowing a continuous area of ventilation. Encircling of the strips is not acceptable. A 6" break shall be placed every 12' in each ribbon to allow cross ventilation. Asphalt application of either system shall be at a minimum rate of 12 lbs./sq.

Note: Spot attached systems shall be limited to a maximum design pressure of -45 psf.

5. Fastener spacing for insulation attachment is based on a Minimum Characteristic Force (F') value of 275 lbf., as tested in compliance with Testing Application Standard TAS 105. If the fastener value, as field-tested, are below 275 lbf. insulation attachment shall not be acceptable.
6. Fastener spacing for mechanical attachment of anchor/base sheet or membrane attachment is based on a minimum fastener resistance value in conjunction with the maximum design value listed within a specific system. Should the fastener resistance be less than that required, as determined by the Building Official, a revised fastener spacing, prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant may be submitted. Said revised fastener spacing shall utilize the withdrawal resistance value taken from Testing Application Standards TAS 105 and calculations in compliance with Roofing Application Standard RAS 117.
7. Perimeter and corner areas shall comply with the enhanced uplift pressure requirements of these areas. Fastener densities shall be increased for both insulation and base sheet as calculated in compliance with Roofing Application Standard RAS 117. Calculations prepared, signed and sealed by a Florida registered Professional Engineer, Registered Architect, or Registered Roof Consultant
(When this limitation is specifically referred within this NOA, General Limitation #9 will not be applicable.)
8. All attachment and sizing of perimeter nailers, metal profile, and/or flashing termination designs shall conform with Roofing Application Standard RAS 111 and applicable wind load requirements.
9. The maximum designed pressure limitation listed shall be applicable to all roof pressure zones (i.e. field, perimeters, and corners). Neither rational analysis, nor extrapolation shall be permitted for enhanced fastening at enhanced pressure zones (i.e. perimeters, extended corners and corners).
(When this limitation is specifically referred within this NOA, General Limitation #7 will not be applicable.)
10. All products listed herein shall have a quality assurance audit in accordance with the Florida Building Code and Rule 61G20-3 of the Florida Administrative Code.

END OF THIS ACCEPTANCE